

**REMARKS**

Applicants respectfully request reconsideration of this application.

Claims 9, 12, 15 and 16 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Mehta (US 5,843,109). Claims 12, 15 and 16 have been amended to more clearly recite certain features of the claimed invention. No new matter has been added, and support for the claim amendments may be found, for example, in the Specification, at Paragraphs 0016 to 0018.

Claim 9 is directed to a surgical method of bone surgery and recites, *inter alia*, "a tip set in vibration at a frequency in the ultrasound range, wherein the vibration of the tip is modulated with low frequency pulses" and a "horizontal crestal incision on edentulous [bone] ridge, by a chisel tip operated by ultrasound, so that it performs an extremely precise and fine incision" (emphasis, clarification added). Claims 12, 15 and 16 are directed to surgical methods of bone surgery and recite, *inter alia*, "a tip set in vibration at a frequency in the ultrasound range, wherein the vibration of the tip is modulated with low frequency pulses to produce an extremely fine and precise cut in the bone tissue" (emphasis added). Applicants submit that Mehta fails to teach or suggest these features.

Mehta discloses a handpiece apparatus for the "disruption (i.e., fragmentation, eroding, sloughing off and emulsification) and removal of unwanted material" from a body that includes a needle for radiating ultrasonic energy into the body and a lumen, provided through the needle, for passing aspiration fluid into, and fragmented material out of, the body. Col. 1:59 to Col. 2:4. Mehta fails to disclose a vibrating tip that is modulated with low frequency pulses to produce an extremely precise and fine incision in bone tissue, as recited by Claims 9, 12, 15 and 16. Instead, Mehta teaches that his handpiece may be used on all types of hard and soft tissues, such as tumors, cartilage, bone, calculi and the like, in order to fragment the tissue and remove the ensuing debris via suction. *See, e.g.,* Col. 1:62–67, etc. Furthermore, Mehta fails to suggest that his apparatus may be used to produce an extremely precise and fine incision in bone tissue. Consequently, Mehta fails to teach or suggest all of the features recited by Claims 9, 12, 15 and 16. Accordingly, these claims are allowable over Mehta.

Moreover, none of the references of record, taken either singly or in combination, teaches or suggests these features.

In view of the foregoing amendments and remarks, Applicants respectfully submit that this application is in condition for allowance and should now be passed to issue.

A Notice of Allowance is respectfully solicited.

If any extension of time is required in connection with the filing of this paper and has not been requested separately, such extension is hereby requested. The Commissioner is hereby authorized to charge any fees and to credit any overpayments that may be required by this paper under 37 C.F.R. §§ 1.16 and 1.17 to Deposit Account No. 02-2135.

Respectfully submitted,

Rothwell, Figg, Ernst & Manbeck P.C.

January 25, 2006

By: \_\_\_\_\_

1425 K Street, N.W., Suite 800  
Washington, D.C. 20005  
(202) 783-6040 (voice)  
(202) 783-6031 (fax)

Adam M. Treiber  
Reg. No. 48,000

2247-114 Amendment 3